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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,763	12/30/2003	Michael D. O'Shea	KCX-731 (19567)	2711
22827	7590	12/31/2007		
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			EXAMINER MYHRE, JAMES W	
			ART UNIT 3622	PAPER NUMBER
			MAIL DATE 12/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/748,763

**Applicant(s)**

O'SHEA ET AL.

**Examiner**

James W. Myhre

**Art Unit**

3622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/04;08/04;11/04;07/05</u> .                                 | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. This Office Action is in response to the initial filing on December 30, 2003.

Claims 1-39 are currently pending and have been considered below.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 12, 19, 20, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3, 12 and 34 use the acronyms "RFID" and/or "RFID STR" without first identifying in the claim the plain text associated with the acronym as required.

Claim 19 uses the acronym "LCD" without first identifying in the claim the plain text associated with the acronym as required.

Claim 20 uses the acronym "CMAC" without first identifying in the claim the plain text associated with the acronym as required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-9, 11-13, and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sloane (5,918,211).

Claims 1, 11, 13, 28, and 30: Sloane discloses a system, method, and apparatus for providing cross-marketing offers to a customer, comprising:

a. a product inventory location (i.e. a store) displaying products with electronic-readable tags (e.g. bar codes) (column 3, lines 12-31 and column 7, line 41 – column 8, line 63);

b. A tag reading device (e.g. a scanner) for reading the tag to retrieve information from the electronic-readable tag (column 3, lines 12-31 and column 7, line 41 - column 8, line 63);

c. determining a cross-marketing promotional offer associated with the product associated with the read tag (column 3, lines 12-31 and column 7, line 41 – column 8, line 63); and

d. notifying the customer in or near real-time of the offer (column 3, lines 12-31 and column 7, line 41 – column 8, line 63).

While Sloane does not explicitly disclose that the product tag is an electronic tag, such as a tag that uses radio-frequencies or infra-red light to transmit data, these were well known within the industry prior to the instant invention and would have been obvious choices as substitutes for Sloane's bar code tags to one having ordinary skill in the art at the time the invention was made. One would have been motivated to use such electronic tags in order to preclude the customer from having to pick up the item or to move the reader next to the shelf (i.e. to "keep both hands free") as discussed in Sloane (column 7, lines 45-48).

Claim 2: Sloane discloses a system as in Claim 1 above, and further discloses the offer is triggered by at least two items in the customer-storage-area (shopping cart)(column 8, lines 21-29).

Claims 3, 4, 12, and 29: Sloane discloses a system, method, and apparatus as in Claims 1, 11, and 28 above, and further discloses incorporating various wireless connections, such as radio frequencies (RF), infrared, cellular, shortwave, and any other known method of transmitting and receiving information without use of direct wire connections" (column 7, lines 52-56). While Sloane does not explicitly disclose that the product tag would also incorporate the RF wireless technology, as discussed above, it would have been obvious to do so to one having ordinary skill in the art at the time the invention was made.

Claim 5: Sloane discloses a system as in Claim 1 above, and further discloses using the store's central computer for performing the offer determining steps (column 7, line 41 – column 8, line 63).

Claim 7: Sloane discloses a system as in Claim 1 above, but does not explicitly disclose that there is a computer on the shopping cart that performs the above steps. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a processor (computer) on the shopping cart and to use that processor to perform at least some of the computations disclosed in Sloane. One would have been motivated to use such an on-board processor (computer) in view of Sloane's disclosure of retrieving and displaying to the customer past offer selections, shopping histories, awarded credits etc. The use of such an on-board processor would free up the store's central computer for other processing, such as check-out processing, possibly resulting in faster, shorter check-out lines (which is one of Sloane's motivations for having the scanners).

Claims 6, 8, 9, and 31: Sloane discloses a system, method, and apparatus as in Claims 1, 7, and 28 above, and further discloses a customer-interface on the shopping cart that displays the scanned or requested product information and/or offer to the customer (column 7, line 41 – column 8, line 63).

Claim 32: Sloane discloses a method as in Claim 28 above, and further discloses detecting the customer's acceptance of the offer by receiving a customer response and determining that the offered product has been placed into the shopping cart (column 3, lines 12-31).

6. Claims 10, 14-27 and 33-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sloane (5,918,211) in view of Humble (GB 2,193,000).

Claims 10, 14, and 17: Sloane discloses a system, method, and apparatus as in Claims 9, 11, and 16 above, but does not explicitly disclose using a scale to measure a physical parameter (e.g. weight) of the product being scanned nor determining if the weight is within a tolerance for the product. However, Humble discloses a similar system, method, and apparatus for shopping in which one or more scales are used to measure the weight of the product in order to compare it with a predetermined weight of the product in order to ensure that the product matches the scanned bar code. Humble discloses that the scale may measure the weight of each individual product or the weight of the shopping cart (i.e. total weight of all products) and determine the difference between the cart prior to the removal of the product at the check-out and after removal, thus determining the weight of the removed product. (column 1, line 27-127). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for Sloane to incorporate a measuring device, such as a scale, into the system in order to verify that the scanned product is actually the one placed in

the cart (or in the bag at check-out). One would have been motivated to use a scale in this manner in view of Humble's disclosure that such systems had been around for years prior to the invention.

Claims 18, 23-26, 33, 35, 37, and 38: Sloane discloses a system, method, and apparatus for providing cross-marketing offers to a customer, comprising:

- a. a product inventory location (i.e. a store) displaying products with electronic-readable tags (e.g. bar codes) (column 3, lines 12-31 and column 7, line 41 – column 8, line 63);
- b. A tag reading device (e.g. a scanner) for reading the tag to retrieve information from the electronic-readable tag (column 3, lines 12-31 and column 7, line 41 - column 8, line 63);
- c. determining a cross-marketing promotional offer associated with the product associated with the read tag (column 3, lines 12-31 and column 7, line 41 – column 8, line 63); and
- d. notifying the customer in or near real-time of the offer (column 3, lines 12-31 and column 7, line 41 – column 8, line 63).

While Sloane does not explicitly disclose that the product tag is an electronic tag, such as a tag that uses radio-frequencies or infra-red light to transmit data, these were well known within the industry prior to the instant invention and would have been obvious choices as substitutes for Sloane's bar code tags to one having ordinary skill in the art at the time the invention was made. One would have been motivated to use



such electronic tags in order to preclude the customer from having to pick up the item or to move the reader next to the shelf (i.e. to "keep both hands free") as discussed in Sloane (column 7, lines 45-48).

While Sloane does not explicitly disclose using a scale to measure a physical parameter (e.g. weight) of the product being scanned nor determining if the weight is within a tolerance for the product. However, Humble discloses a similar system, method, and apparatus for shopping in which one or more scales are used to measure the weight of the product in order to compare it with a predetermined weight of the product in order to ensure that the product matches the scanned bar code. Humble discloses that the scale may measure the weight of each individual product or the weight of the shopping cart (i.e. total weight of all products) and determine the difference between the cart prior to the removal of the product at the check-out and after removal, thus determining the weight of the removed product. (column 1, line 27-127). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for Sloane to incorporate a measuring device, such as a scale, into the system in order to verify that the scanned product is actually the one placed in the cart (or in the bag at check-out). One would have been motivated to use a scale in this manner in view of Humble's disclosure that such systems had been around for years prior to the invention.

Claim 19: Sloane and Humble disclose an apparatus as in Claim 18 above, and Sloane further discloses a customer-interface on the shopping cart that displays the scanned or requested product information and/or offer to the customer (column 7, line 41 – column 8, line 63).

Claim 20: Sloane and Humble disclose an apparatus as in Claim 19 above, and Sloane further discloses using the store's central computer for performing the offer determining steps (column 7, line 41 – column 8, line 63).

Claims 15 and 21: Sloane and Humble disclose an apparatus as in Claim 14 and 19 above, and Sloane further discloses transferring the product information from the cart to the check-out computer (column 3, lines 48-59).

Claims 16, 27, and 36: Sloane and Humble disclose a method and apparatus as in Claims 15, 26, and 33 above, and Sloane further discloses determining the total and net sales price for the products checked through the check-out to include adding sales taxes and subtracting discounts (column 3, lines 48-59).

Claim 22: Sloane and Humble disclose an apparatus as in Claim 19 above, but neither explicitly disclose that the tag reader and the scale are integrated into the same component. However, such integration would have been obvious to one having ordinary skill in the art at the time the invention was made in order to more easily pass

the data between the two devices as disclosed by Humble. Furthermore, such an integration would eliminate the need to have connecting wires running through the shopping cart that may be damaged by the customer and the normal usage of the cart.

Claim 34: Sloane and Humble disclose a method as in Claim 33 above, and Sloane further discloses incorporating various wireless connections, such as radio frequencies (RF), infrared, cellular, shortwave, and any other known method of transmitting and receiving information without use of direct wire connections" (column 7, lines 52-56).

While Sloane does not explicitly disclose that the product tag would also incorporate the RF wireless technology, as discussed above, it would have been obvious to do so to one having ordinary skill in the art at the time the invention was made.

Claim 39: Sloane and Humble disclose a method as in Claim 33 above, and Humble further discloses automatically notifying the customer when the weight is not within the correct tolerance (column 1, lines 27-127). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for Sloane to notify the customer when such an error was detected. One would have been motivated to notify the customer of the error in order to allow the customer to correct the mistake (such as removing the second item, scanning the items slower, etc. as discussed by Humble).

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Collins, Jr. (4,929,819) discloses a system and method for self-service shopping using a scanner and camera mounted on a shopping cart that also notifies the customer when an error is detected in the scanned item and the picture of the item.

b. Johnsen (5,250,789) discloses a system and method for a shopping cart on which a scanner and display are mounted that also issues promotions to the customer upon the scanning of a product.

c. Allen et al (5,485,006) discloses a system and method for detecting products in a shopping cart using IR sensors.

d. Murrah (5,691,684) discloses a system and method for using an attached computer, scanner, and display to generate shopping list from a household appliance.

e. O'Hagan et al (5,821,512) discloses a system and method for a shopping cart mounted portable data collector/reader that also presents coupons to the customer.

f. Tracy et al (5,979,757) discloses a system and method for presenting item information on a portable data terminal used by a customer while shopping in a store that also present promotions of products to the customer.

g. Jelen et al (6,119,935) discloses a system and method for a shopping cart mounted portable data collector/reader that also presents coupons to the customer.

h. Becker et al (6,168,079) discloses a system and method for a customer information terminal mounted on a shopping cart that is equipped with an IR receiver for communication with IR transmitters throughout the store.

i. Blaeuer (6,484,939) discloses a system and method for self scanning and check-out of a shopping cart with electronic advertisements receiving from "shelf-talkers", IR tags located by the products on the shelves.

j. Swartz et al (US 2002/0050526) discloses a system and method for portable shopping device attached to a shopping cart with a computer, scanner, and display.

k. Marion (US 2002/0099610) discloses a system and method for a shopping cart that receives IR signals from electronic tags next to products that relate product information, promotions, price, etc. to the customer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Myhre whose telephone number is (571) 272-6722. The examiner can normally be reached on Monday through Thursday 6:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Handwritten signature of JWM in black ink.

December 21, 2007

Handwritten signature of James W. Myhre in black ink.

James W. Myhre  
Primary Patent Examiner